



Compound

3520**NITRILE - BUTADIENE
50 DUROMETER
BLACK COLOR****PRODUCT DATA SHEET**

Compound 3520 is a 50 durometer black colored Buna N elastomer, it is formulated for uses in hot petroleum based oils. It has good resistance to heat and compression set.

This compound will meet or exceed the specifications listed and has the following physical properties:

ASTM D2000 2 BG 515 B14 B34 EA14 EF11 EF21 EO14 EO33
3 BG 515 B14
4 BG 515 B14
5 BG 515 A14 B14 B34 EO14 EO34 F17

Original Properties

Modulus @ 100% Elongation	178 psi	1.2 MPa
Tensile Strength	1710 psi	11.8 MPa
Ultimate Elongation	540 %	
Hardness, Shore A	52 Durometer	
Specific Gravity	1.19 grams/cc	
Brittleness Temperature	-51 °F	-46 °C
Tear Resistance, Die B	203 ppi	35.6 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	11.0 %
Solid: 70 hrs @ 212°F (100°C)	14.3 %
Plied: 22 hrs @ 212°F (100°C)	14.6 %
Plied: 22 hrs @ 257°F (125°C)	21.3 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 11.5 %
Change - Elongation	- 13.0 %
Change - Hardness, Shore A	+ 8
Change - Weight	- 6.0 %

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 17.6 %
Change - Elongation	- 46.3 %
Change - Hardness, Shore A	+ 17

HEAT AGED: 70 hrs @ 257°F (125°C) Test Tube Method

Change - Tensile Strength	+ 17.6 %
Change - Elongation	- 46.3 %
Change - Hardness, Shore A	+ 17



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Change - Tensile Strength	- 5.1 %
Change - Elongation	- 5.6 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 1.3 %

ASTM REFERENCE FUEL B: 70 hrs @ RT (73°F, 23°C)

Change - Tensile Strength	- 44.6 %
Change - Elongation	- 37.0 %
Change - Hardness, Shore A	- 16
Change - Volume	+ 30.8 %

ASTM REFERENCE FUEL C: 70 hrs @ RT (73°F, 23°C)

Change - Tensile Strength	- 64.7 %
Change - Elongation	- 37.0 %
Change - Hardness, Shore A	- 21
Change - Volume	+ 62.1 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 9.8 %
Change - Elongation	- 3.7 %
Change - Hardness, Shore A	+ 5
Change - Volume	- 6.7 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

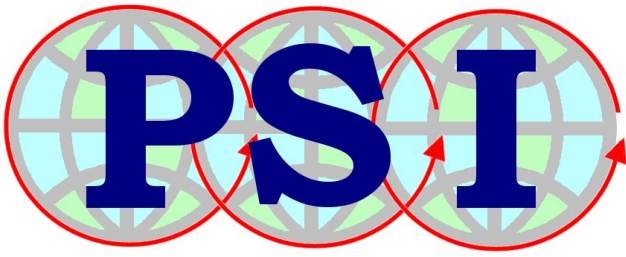
Change - Tensile Strength	- 15.4 %
Change - Elongation	- 42.6 %
Change - Hardness, Shore A	+ 5
Change - Volume	- 6.8 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 0.2 %
Change - Elongation	+ 1.9 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 9.8 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 26.3 %
Change - Elongation	- 37.1 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 12.5 %



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Tear Resistance, Method D 624, Die B

Tear Resistance

203.0 ppi